

a plurality of first electrical contact locations on said first side;

a plurality of probe tips disposed on said first contact locations;

each of said probe tips having an elongated electrically conductive member projecting from an enlarged base, said base being disposed on said contact locations;

means for moving said substrate towards said work piece so that said plurality of probe tips are pressed into contact with said plurality of contact locations on said work piece;

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[An apparatus according to claim 2 wherein] ^{NAB?} said protuberance has a first coating selected from the group consisting of Cr, Ti, TiN, Ni, Zr, ZrN [or] and Co and a second coating over said first coating selected from the group consisting of Pt, Ir, Rh, Ru and Pd.

5. (Amended) An apparatus for electrically testing a work piece having a plurality of electrically conductive contact locations thereon comprising:

a substrate having a first surface and a second surface;

a plurality of first electrical contact locations on said first side;

a plurality of probe tips disposed on said first contact locations;

each of said probe tips having an elongated electrically conductive member projecting from an enlarged base, said base being disposed on said contact locations;

means for moving said substrate towards said work piece so that said plurality of probe tips are pressed into contact with said plurality of contact locations on said work piece;

[An apparatus according to claim 1, wherein] said substrate further includes a decoupling capacitor.

6. (Amended) An apparatus for electrically testing a work piece having a plurality of electrically conductive contact locations thereon comprising:

a substrate having a first surface and a second surface;

a plurality of first electrical contact locations on said first side;

a plurality of probe tips disposed on said first contact locations;

each of said probe tips having an elongated electrically conductive member projecting from an enlarged base, said base being disposed on said contact locations;

means for moving said substrate towards said work piece so that said plurality of probe tips are pressed into contact with said plurality of contact locations on said work piece;

[An apparatus according to claim 1, wherein] said elongated member has a flattened end.

7. (Amended) An apparatus for electrically testing a work piece having a plurality of

electrically conductive contact locations thereon comprising:

a substrate having a first surface and a second surface;

a plurality of first electrical contact locations on said first side;

a plurality of probe tips disposed on said first contact locations;

each of said probe tips having an elongated electrically conductive member projecting from an enlarged base, said base being disposed on said contact locations;

means for moving said substrate towards said work piece so that said plurality of probe tips are pressed into contact with said plurality of contact locations on said work piece;

[An apparatus according to claim 1 wherein] said second surface has a plurality of second electrical contact locations thereon.

8. (Amended) An apparatus for electrically testing a work piece having a plurality of electrically conductive contact locations thereon comprising:

a substrate having a first surface and a second surface;

a plurality of first electrical contact locations on said first side;

a plurality of probe tips disposed on said first contact locations;

each of said probe tips having an elongated electrically conductive member projecting from an enlarged base, said base being disposed on said contact locations;

means for moving said substrate towards said work piece so that said plurality of probe

tips are pressed into contact with said plurality of contact locations on said work piece;

fig #
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[An apparatus according to claim 1, wherein said] [?] second contact locations have an elongated electrical conductor attached thereto.

9. (Amended) An apparatus for electrically testing a work piece having a plurality of electrically conductive contact locations thereon comprising:

a substrate having a first surface and a second surface;

a plurality of first electrical contact locations on said first side;

a plurality of probe tips disposed on said first contact locations;

each of said probe tips having an elongated electrically conductive member projecting from an enlarged base, said base being disposed on said contact locations;

means for moving said substrate towards said work piece so that said plurality of probe tips are pressed into contact with said plurality of contact locations on said work piece;

[?] [An apparatus according to claim 1 wherein] [?] said substrate has electrical conductor patterns extending from said first surface to said second surface.

10. (Amended) An apparatus for electrically testing a work piece having a plurality of electrically conductive contact locations thereon comprising:

a substrate having a first surface and a second surface;

a plurality of first electrical contact locations on said first side;

~~a plurality of probe tips disposed on said first contact locations;~~

~~each of said probe tips having an elongated electrically conductive member projecting from an enlarged base, said base being disposed on said contact locations;~~

~~means for moving said substrate towards said work piece so that said plurality of probe tips are pressed into contact with said plurality of contact locations on said work piece;~~

~~[An apparatus according to claim 1, further including] a sheet of material having a plurality of openings, said opening being positioned to align with said plurality of probe tips, said sheet is disposed over said plurality of probe tips, said elongated electrically conductive members being disposed in said opening.~~

23. (Amended) A structure comprising:

a substrate having a first surface and a second surface;

said second surface has a plurality of electrically conductive contact locations thereon;

a plurality of electrically conductive members disposed on said surface;

said electrically conductive members have an [elongated] enlarged base, an elongated electrically conductive member in contact with said base and having an end extending away from said base;

~~said end being enlarged.~~

44. (Added) A structure comprising:

a substrate having a surface;

a plurality of electrically conductive members disposed on said surface;

fig 1-7
said electrically conductive members have an enlarged base, an elongated electrically conductive member in contact with said enlarged base and having an end extending away from said base;

said end being enlarged;

said end has a first coating selected from the group consisting of Cr, Ti, TiN, Ni, Zr, ZrN or Co and a second coating over said first coating selected from the group consisting of Pt, Ir, Rh, Ru and Pd.

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45. (Added) A structure comprising

a substrate having a surface;

a plurality of electrically conductive members disposed on said surface;

each of
said electrically conductive members have an enlarged base, an elongated electrically conductive member in contact with said base and having an end extending away from said base;

said end being enlarged;

?
~~said substrate further includes a decoupling capacitor.~~

46. (Added) A structure comprising:

a substrate having a surface;

a plurality of electrically conductive members disposed on said surface;

fig 1-7
said electrically conductive members have an enlarged base, an elongated electrically conductive member in contact with said base and having an end extending away from said base;

said end being enlarged and flattened.

47. (Added) A structure comprising:

a substrate having a first surface and a second surface;

a plurality of electrically conductive members disposed on said surface;

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said electrically conductive members have an enlarged base, an elongated electrically conductive member in contact with said base and having an end extending away from said base;

fig 8
said end being enlarged;

said second surface has a plurality of electrical contact locations thereon;

said contact locations have an elongated electrical conductor attached thereto.

48. (Added) A structure comprising:

a substrate having a surface;

~~a plurality of electrically conductive members disposed on said surface;~~